

AMENDMENTS TO THE CLAIMS

1.-19. (Canceled)

20. (Currently Amended) A digital subscriber's network terminal for home automation communication, comprising:

a home automation service channel module for receiving home automation data from a home automation equipment through a communication channel formed between the home automation equipment and the home automation service channel module; and

a low rate ~~band~~ processing unit for mapping an output signal of the home automation service channel module to a signal sequence of a low rate band of a data communication band used by a digital subscriber's network and transferring the mapped signal sequence to a digital subscriber's network access unit.

21. (Previously Presented) The digital subscriber's network terminal of claim 20, wherein the home automation service channel module generates a home automation service message based on a message type and an information element for the received home automation data.

22. (Previously Presented) The digital subscriber's network terminal of claim 21, wherein the home automation service message includes a home automation service protocol identifier field, a home automation service reference number field, a message type field including a home automation service content (a request or response), and a home automation service related parameter.

23. (Previously Presented) The digital subscriber's network terminal of claim 22, wherein the home automation service related parameter includes user information and the user information includes telephone number information linked to the digital subscriber's network terminal.

24. (Previously Presented) The digital subscriber's network terminal of claim 20, wherein the home automation service channel module forms a wireless or wired communication channel with the home automation equipment.

25. (Previously Presented) The digital subscriber's network terminal of claim 20, wherein the digital subscriber's network terminal is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM).

26. (Currently Amended) A digital subscriber's network terminal for home automation communication, comprising:

a low rate band processing unit for receiving home automation data mapped to a signal sequence of a low rate band of a data communication band used by a digital subscriber's network from a digital subscriber's network accessing unit and extracting the home automation data from the signal sequence; and

a home automation service channel module for transferring an output signal of the low rate band processing unit to a home automation equipment through a communication channel formed between the home automation equipment and the home automation service channel module.

27. (Previously Presented) The digital subscriber's network terminal of claim 26, wherein the home automation data include a home automation service message formed based on a message type and an information element, and

the home automation service channel module extracts the message type and the information element from the home automation service message and transfers the message type and the information element to a corresponding home automation equipment.

28. (Previously Presented) The digital subscriber's network terminal of claim 27, wherein the home automation service message includes a home automation service protocol identifier field, a home automation service reference number field, a message type field including a home automation service content (a request or response), and a home automation service related parameter.

29. (Previously Presented) The digital subscriber's network terminal of claim 28, wherein the home automation service related parameter includes user information and the user information includes telephone number information linked to the digital subscriber's network terminal.

30. (Previously Presented) The digital subscriber's network terminal of claim 26, wherein the home automation service channel module forms a wireless or wired communication channel with the home automation equipment.

31. (Previously Presented) The digital subscriber's network terminal of claim 26, wherein the digital subscriber's network terminal is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM).

32. (Currently Amended) A digital subscriber's network accessing apparatus for home automation communication, comprising:

a home automation service channel module for receiving home automation data from a home automation communication server through a communication channel formed between the home automation communication server and the home automation service channel module; and

a low rate ~~band~~ processing unit for mapping an output signal of the home automation service channel module to a signal sequence of a low rate band of a data communication band used by a digital subscriber's network and transferring the mapped signal sequence to a digital subscriber's network terminal.

33. (Previously Presented) The digital subscriber's network accessing apparatus of claim 32, wherein the home automation data include a home automation service message generated based on a message type and an information element.

34. (Previously Presented) The digital subscriber's network accessing apparatus of claim 33, wherein the home automation service message includes a home automation service protocol identifier field, a home automation service reference number field, a message type field including a home automation service content (a request or response), and a home automation service related parameter.

35. (Previously Presented) The digital subscriber's network accessing apparatus of claim 34, wherein the home automation service related parameter includes user information and the user information includes telephone number information linked to the digital subscriber's network terminal.

36. (Previously Presented) The digital subscriber's network accessing apparatus of claim 32, wherein the digital subscriber's network accessing apparatus is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM).

37. (Currently Amended) A digital subscriber's network accessing apparatus for home automation communication, comprising:

a low rate band processing unit for receiving home automation data mapped to a signal sequence of a low rate band of a data communication band used by a digital subscriber's network from a digital subscriber's network terminal and extracting the home automation data from the signal sequence; and

a home automation service channel module for transferring an output signal of the low rate band processing unit to a home automation communication server through a communication channel formed between the home automation communication server and the home automation service channel module.

38. (Previously Presented) The digital subscriber's network accessing apparatus of claim 37, wherein the home automation data include a home automation service message formed based on a message type and an information element.

39. (Previously Presented) The digital subscriber's network accessing apparatus of claim 38, wherein the home automation service message includes a home automation service protocol identifier field, a home automation service reference number field, a message type field including a home automation service content (a request or response), and a home automation service related parameter.

40. (Previously Presented) The digital subscriber's network accessing apparatus of claim 39, wherein the home automation service related parameter includes user information and the user information includes telephone number information linked to the digital subscriber's network terminal.

41. (Previously Presented) The digital subscriber's network accessing apparatus of claim 37, wherein the digital subscriber's network accessing apparatus is of any one between a dual link discrete multi-tone (DLDMT) or an asynchronous transfer mode (ATM).